

## **APPENDIX A**

### **(Preliminary WDOE Review of Historical Reports and Records)**

Note: The summary, comments and recommendations noted in this Appendix A were prepared by Ecology and have not been subjected to review by or consultation with Kaiser.

#### **I. OIL HOUSE AREA**

##### **A. Oil House Tank Removal (1990) – 10,000-gallon UST (waste oil) located immediately south of the Oil House**

- PCBs and TPH detected in soils directly beneath the UST; soils were excavated.
- 1400 cubic feet of TPH-contaminated soil removed; excavation extended up to 22 feet.
- Composite side and wall samples had TPH (EPA Method 418.1) concentrations range from 23 to 340 mg/kg. Samples were not analyzed for PCBs.
- Area was capped with asphalt after the excavation was backfilled with clean soil.
- This tank is the likely source of PCBs in the product lens in the area.
- This is identified as a Solid Waste Management Unit (SWMU) in the RCRA Facility Assessment Report (FAR).

Comments:

Soil samples were not analyzed for PCBs after excavation.

Lateral extent and vertical extent (below 22 feet) of TPH and PCB, as well as VOCs, sVOCs, and total metals, contamination have not been evaluated.

##### **B. 20,000-Gallon Unleaded Gasoline UST Removal (1991) – located northeast of the Oil House**

- Approximately 1,200 cubic yards excavated; excavation was terminated at 18 feet.
- Excavation bottom sample collected beneath the dispenser area had 1700 mg/kg gasoline, and 310 mg/kg diesel. All other verification side and bottom samples had TPH below 100 mg/kg.
- Area was capped with asphalt after backfilling with clean fill.

Comments:

Contaminated soils underneath the dispenser area were left after 18 feet deep excavation. The lateral extent and vertical extent of TPH contamination underneath the dispenser area have not been determined.

Additional testing for TPH, BTEX, VOCs, and semi-VOCs are recommended.

**C. Eight USTs Removed (1991)** – Seven 10,000-gallon USTs (mineral oil, Stoddard solvent, or kerosene), one 1,000-gallon UST (unleaded gasoline), located immediately north of the Oil House

- Approximately 7,000 cubic yards of soils removed; excavation depth up to 32 feet.
- Verification samples had TPH (EPA Method 8015 Modified) ranging from 215 to 69,000 mg/kg. TPH detections were generally in the Kensol range. No Gasoline range hydrocarbons, BTEX, or PCBs were detected.
- Area was capped with asphalt after backfilling with clean fill.
- One or more of these tanks were likely sources of free-phase petroleum in ground water in the area.

Comments:

Lateral extent and vertical extent of TPH contamination have not been determined. TPH contaminated soils were left after up to 32 feet of excavation.

Additional sampling to confirm absence of BTEX, PCBs, VOCs, and semi-VOCs is necessary.

The absence or presence of soil vapor in soils at depth greater than 32 feet has to be evaluated.

**D. Oil House French Drain Removal (1991)** – The French drains were located off the northwest and southwest corners of the Oil House, on either side of a concrete pad previously used to store drums.

- PCBs were discovered in soils while closing the drain at the north end.
- Concrete slab and concrete north ramp were removed along with the asphalt at north end. About 1,050 cubic yards of removed concrete and excavated soils were hauled to a TSCA permitted landfill. Excavation was initially to 4 feet and increased to 5 feet. Confirmation samples had PCB (Aroclor 1248) concentration up to 130 mg/kg.
- Additional excavation up to 7 feet was conducted. PCB in soil samples after excavation range from 0.028 to 230 mg/kg.
- Excavation was backfilled with clean soils and covered with asphalt.
- Nine soil borings advanced to determine vertical extent of PCB contamination. PCBs were detected in soils located beneath the north drain up to 65 feet deep (0.54 mg/kg) and up to the water table for the soils beneath the south drain (0.24 mg/kg at 80 feet deep).

- Concentrations of PCBs in soils in the area range from <0.2 to 2,900 mg/kg and are highest near the surface.
- Elevated concentrations of TPH are present in the 65 to 80 feet deep smear zone, concentrations of PCBs in the smear zone range from <0.2 to 0.6 mg/kg.

Comments:

Depth of contamination of PCB contaminated soils and extent of PCB smear zone need to be evaluated.

Extent of TPH contamination, including the smear zone, is not defined.

E. **Tank Farm Kensol Spill (1991)** – Kensol 51, an aluminum rolling lubricant, was spilled (volume unknown) from a leak in a transfer line located in the Tank Farm east of the Oil House.

- 300 cubic yards of soils were removed. Excavation depth was up to 12 feet. Excavation bottom composite sample had TPH (Method 418.1) concentration of 12,000 mg/kg.
- Five borings were advanced and completed as monitoring wells. TPH results show a maximum of 25,750 mg/kg at 66 feet deep. Free product was detected on the water table in 3 wells.
- An extraction well was installed (now part of the Interim Remedial Measures) to recover free product.

Comment:

Lateral extent and vertical extent of TPH contamination, including extent of smear zone, are not known.